FIG.1

# FIG.2

BLOCK DIAGRAM FOR OVERALL
COLOR IMAGE PROCESSING

200
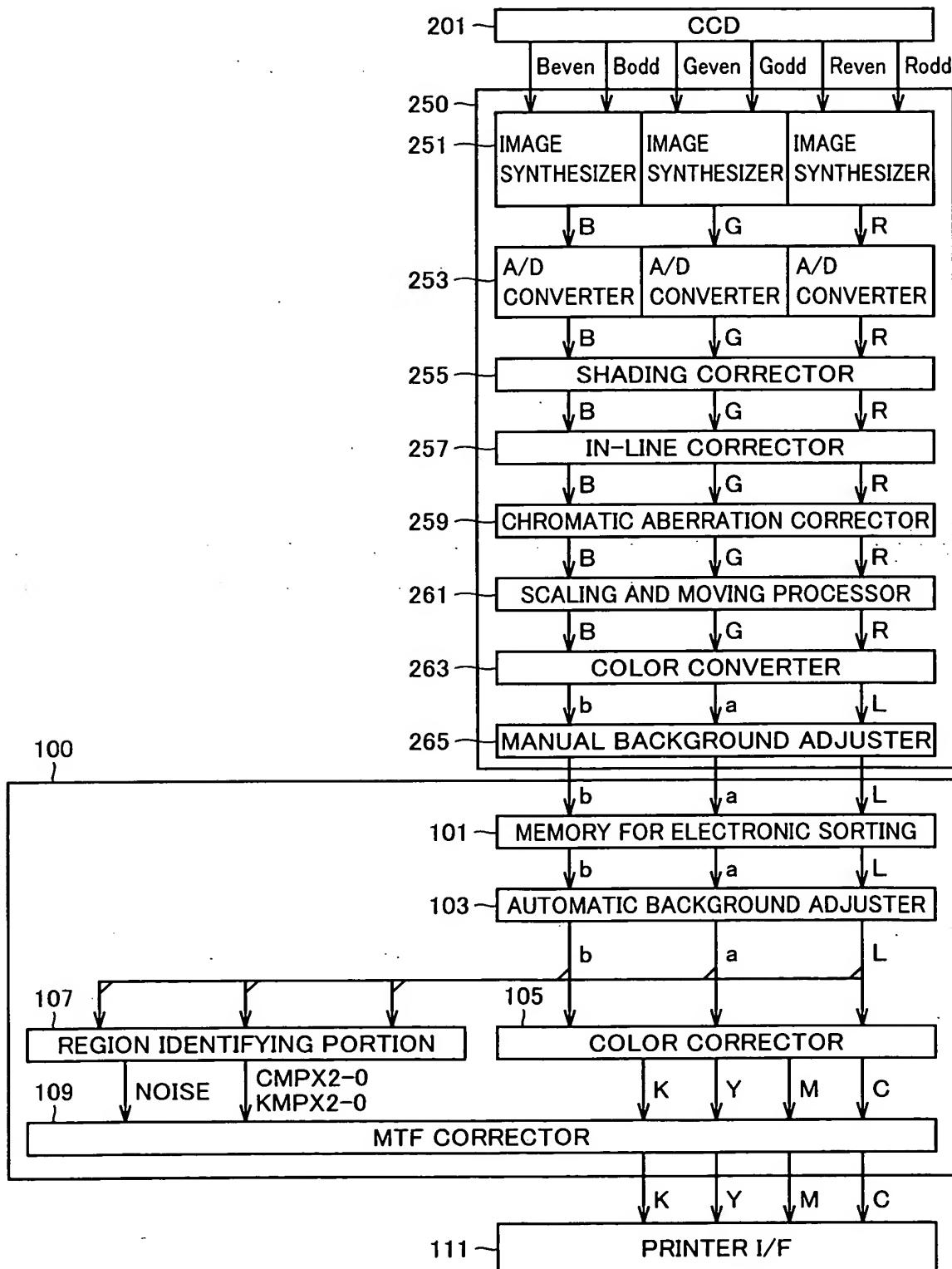
FIG.3
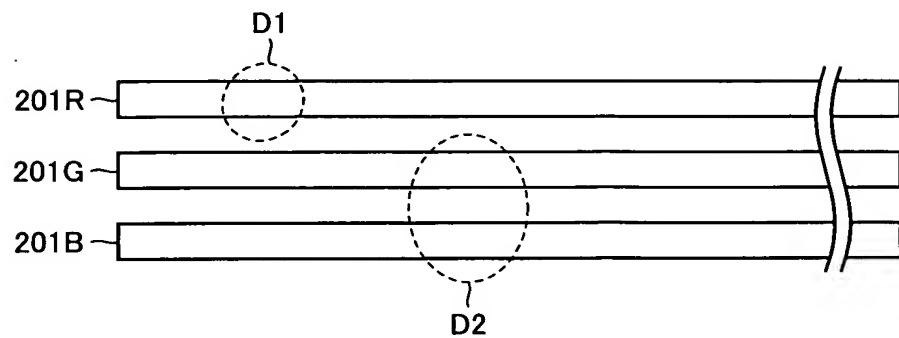
FIG.4

REGION IDENTIFYING PORTION 107
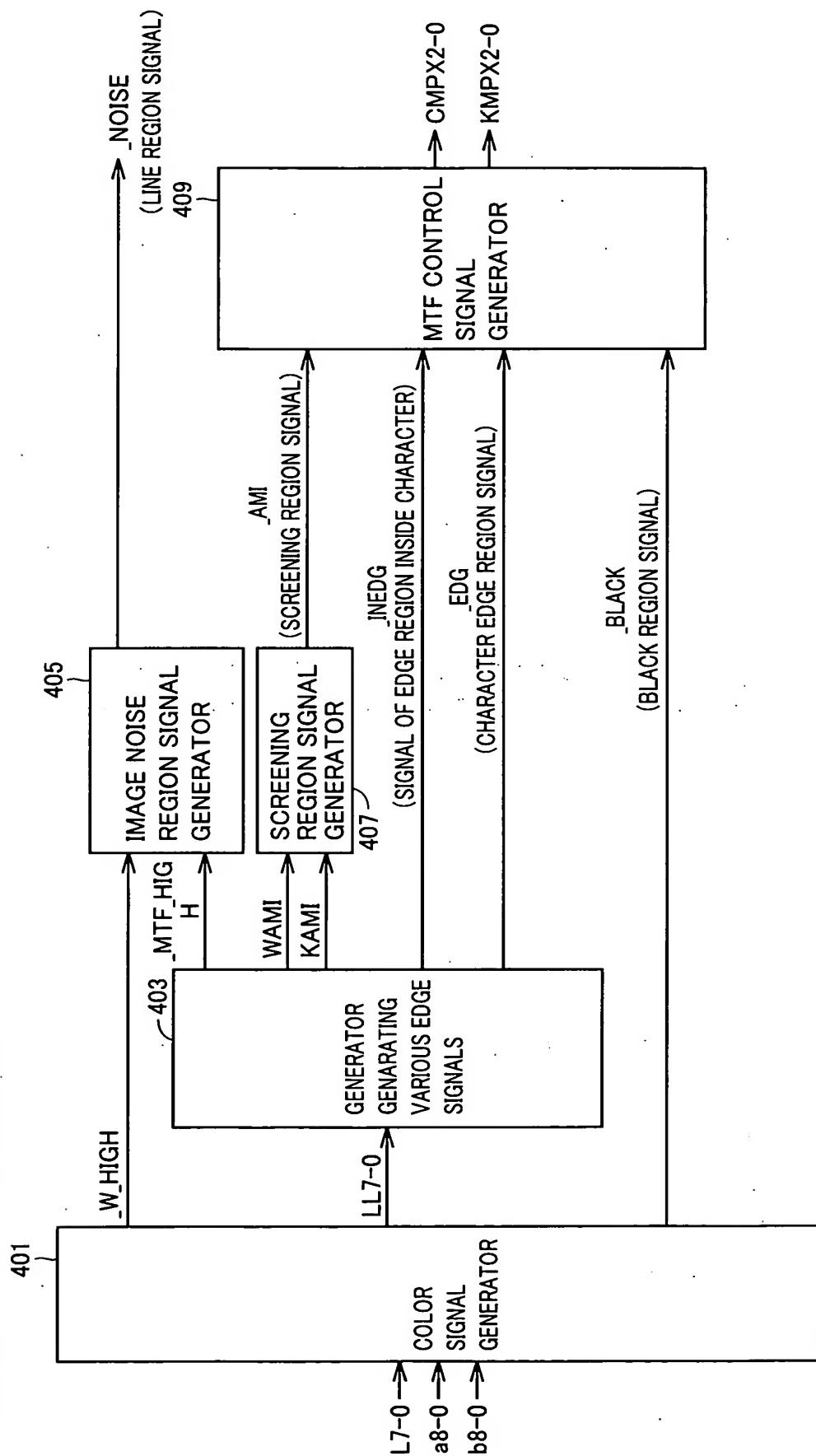
# FIG.5

COLOR SIGNAL GENERATOR 401

FIG.6
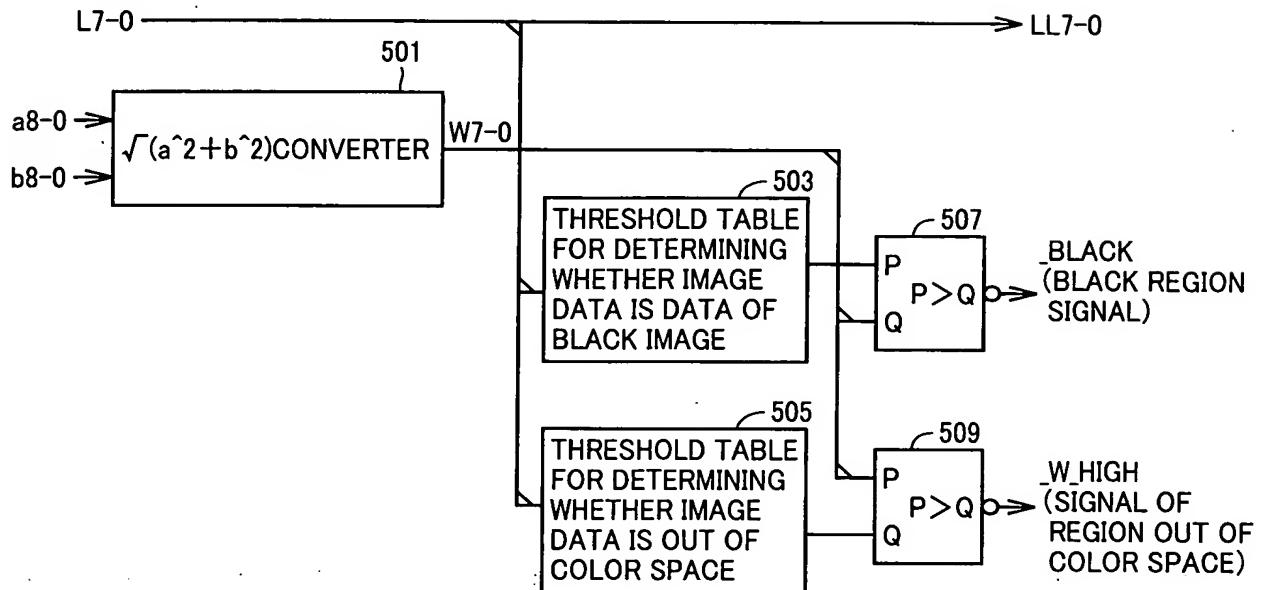
GENERATOR 403 GENERATING VARIOUS EDGE SIGNALS
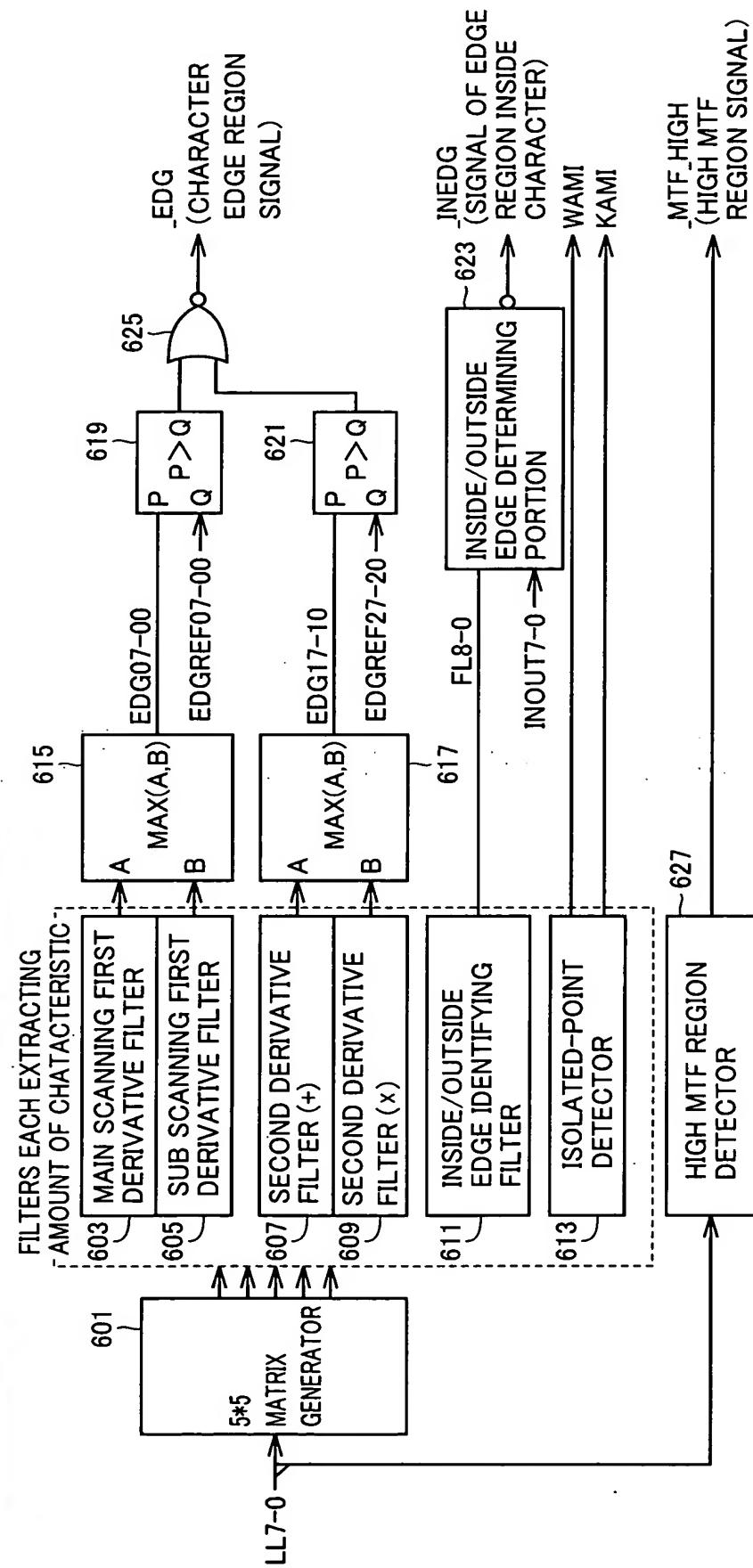
FIG.7

HIGH MTF REGION DETECTOR 627
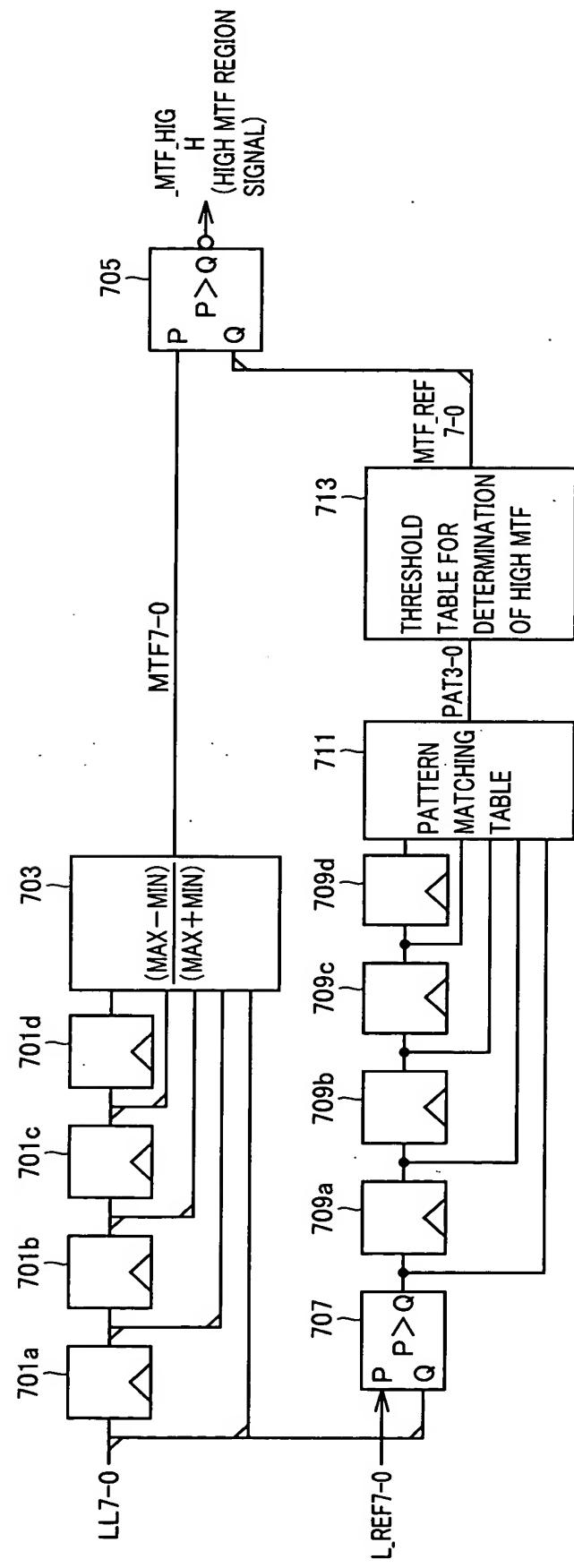
FIG.8

IMAGE NOISE REGION SIGNAL GENERATOR 405
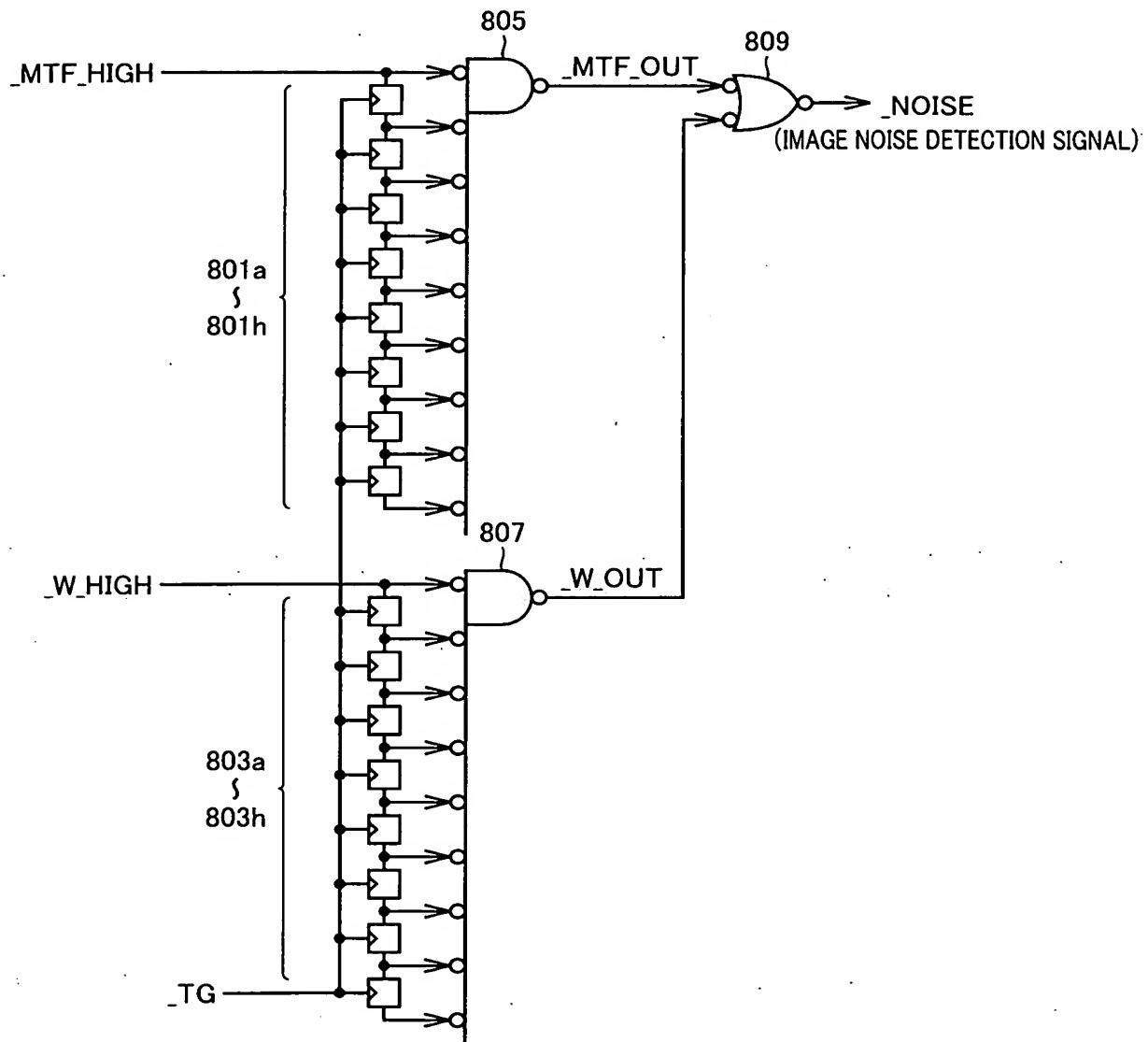
FIG.9

MTF CORRECTOR 109

FIG.10

THRESHOLD TABLE FOR DETERMINING WHETHER
IMAGE DATA IS OUT OF COLOR SPACE

W
(CHROMATICNESS)

OUT OF COLOR SPACE(_W HIGH)

OVERALL COLOR SPACE

BLACK REGION(_BLACK)

L
(LIGHTNESS)
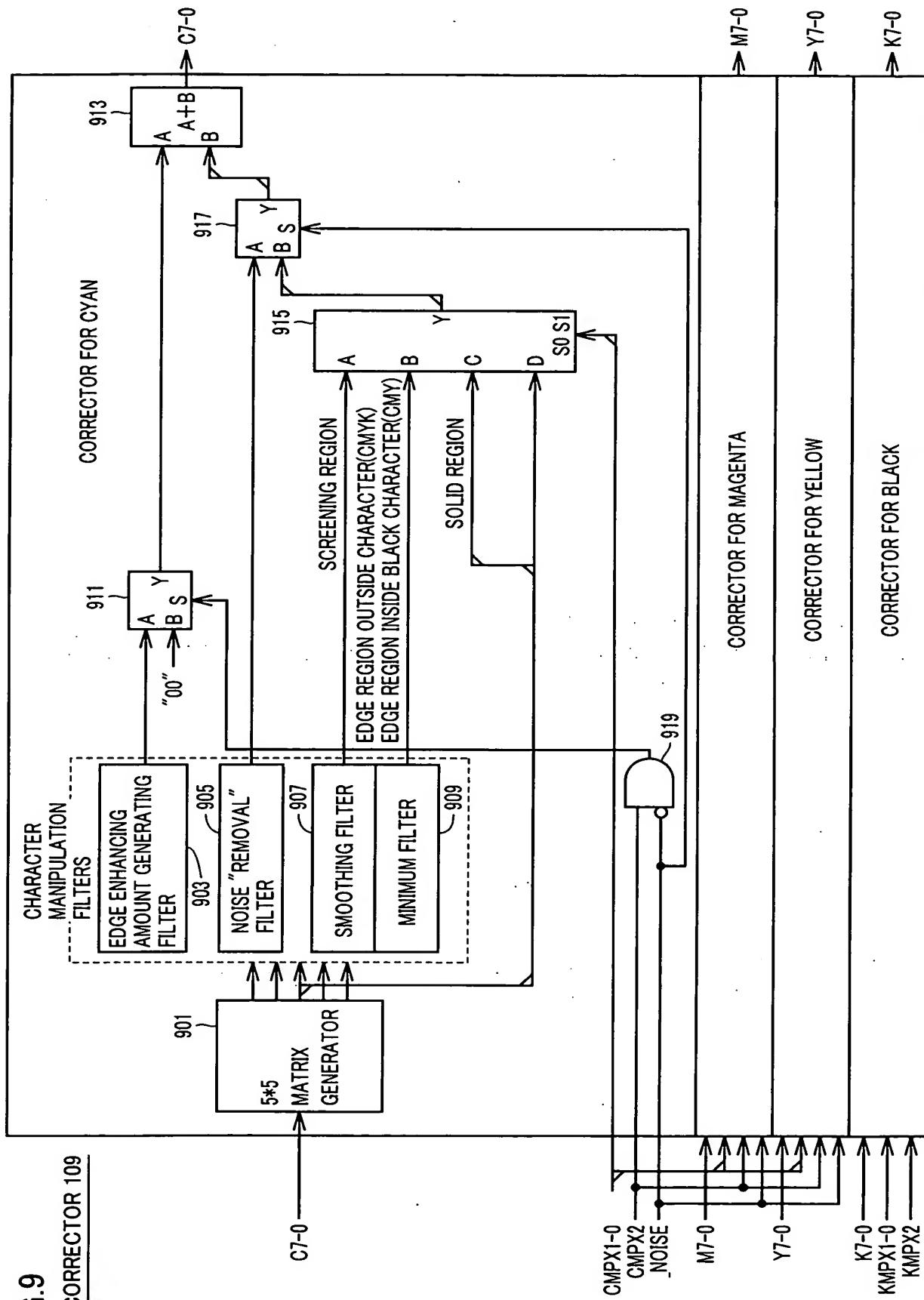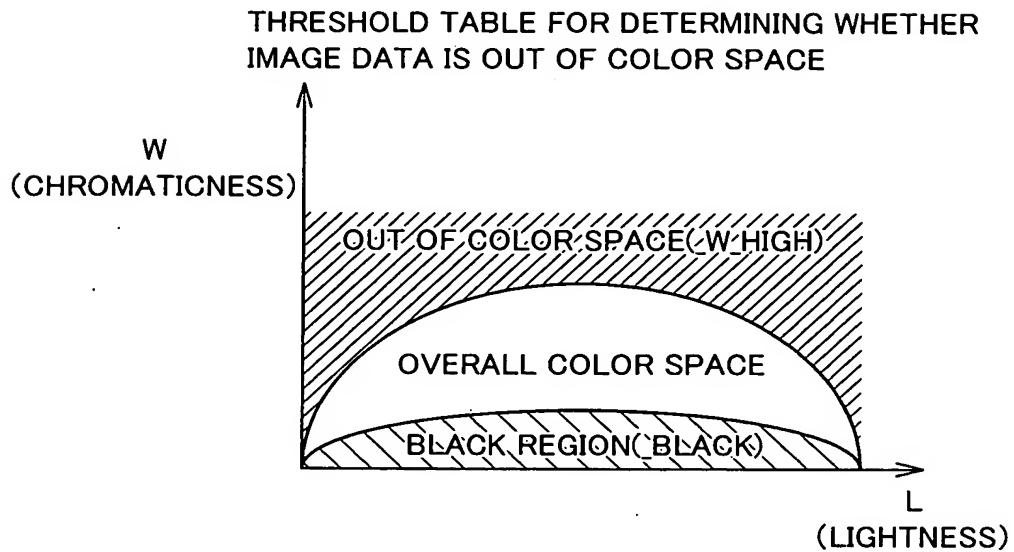
FIG.11

PATTERN MATCHING TABLE
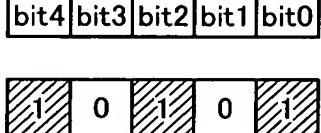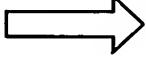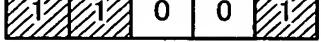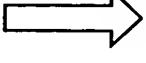
bit4	bit3	bit2	bit1	bit0		PAT3-0
1	0	1	0	1	⟹	12
1	1	0	0	1	⟹	6
1	1	1	0	0	⟹	3

FIG.12

THRESHOLD TABLE FOR DETERMINATION OF HITH MTF

FIG.13
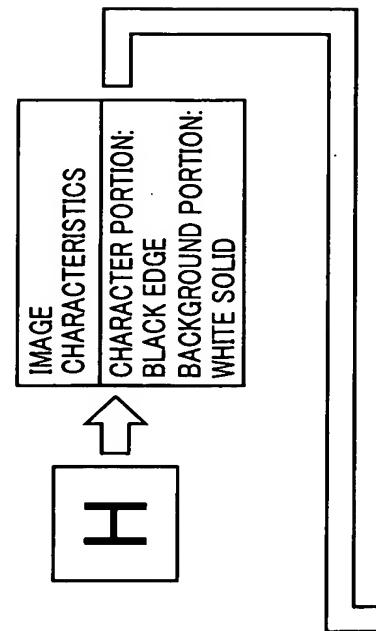
IMAGE CHARACTERISTICS

CHARACTER PORTION: BLACK EDGE
BACKGROUND PORTION: WHITE SOLID

IMAGE AREA	IDENTIFYING SIGNALS			
	AMI	INEDG	EDG	BLACK
OUTSIDE EDGE PORTION	1	1	0	1
INSIDE EDGE PORTION	1	0	0	0
SOLID PORTION	1	1	1	1

MTF CONTROL SIGNAL FOR CMY				MTF CONTROL SIGNAL FOR K			
BASE MANIPULATION	CMPX1-0	EDGE ENHANCEMENT	CMPX2	BASE MANIPULATION	KMPX1-0	EDGE ENHANCEMENT	KMPX2
MINIMUM PROCESSING	1	NO	1	MINIMUM PROCESSING	1	NO	1
MINIMUM PROCESSING	1	NO	1	NO MANIPULATION	2	YES	0
NO MANIPULATION	2	NO	1	NO MANIPULATION	2	NO	1

FIG.14

IMAGE CHARACTERISTICS

CHARACTER PORTION: BLACK EDGE
BACKGROUND PORTION: SCREENING

IMAGE AREA	IDENTIFYING SIGNALS			
	AMI	INEDG	EDG	BLACK
OUTSIDE EDGE PORTION	0	-	-	-
INSIDE EDGE PORTION	0	-	-	-
SOLID PORTION	0	-	-	-

MTF CONTROL SIGNAL FOR CMY				MTF CONTROL SIGNAL FOR K			
BASE MANIPULATION	CMPX1-0	EDGE ENHANCEMENT	CMPX2	BASE MANIPULATION	KMPX1-0	EDGE ENHANCEMENT	KMPX2
SMOOTHING	0	NO	1	SMOOTHING	0	NO	1
SMOOTHING	0	NO	1	SMOOTHING	0	NO	1
SMOOTHING	0	NO	1	SMOOTHING	0	NO	1

FIG.15

IMAGE CHARACTERISTICS	
CHARACTER PORTION:	COLOR EDGE
BACKGROUND PORTION:	WHITE SOLID

IMAGE AREA	IDENTIFYING SIGNALS			
	_AMI	_INEDG	_EDG	_BLACK
OUTSIDE EDGE PORTION	1	1	0	1
INSIDE EDGE PORTION	1	0	0	1
SOLID PORTION	1	1	1	1

MTF CONTROL SIGNAL FOR CMY			
BASE MANIPULATION	CMPX1-0	EDGE ENHANCEMENT	CMPX2
MINIMUM PROCESSING	1	NO	1
NO MANIPULATION	2	YES	0
NO MANIPULATION	2	NO	1

MTF CONTROL SIGNAL FOR K			
BASE MANIPULATION	KMPX1-0	EDGE ENHANCEMENT	KMPX2
MINIMUM PROCESSING	1	NO	1
NO MANIPULATION	2	YES	0
NO MANIPULATION	2	NO	1

FIG.16

NOISE REMOVAL FILTER 905

2	1	0	1	2